

Remarks/Arguments:

Drawings are submitted herewith, as required in parent application no. 09/249,087 (Office Action mailed November 24, 1999), and as filed in the parent application (May 24, 2000). Upon approval of the submitted informal drawings, formal drawings will be submitted.

Claim 3, currently amended, claims 4-8, previously presented, and claim 9, presented hereby, are pending.

Claims 1 and 2 are canceled, without prejudice or disclaimer.

Claim 3 is amended, hereby, to more clearly define the instant invention, as described in the paragraph bridging pages 2 and 3 in the subject application (and, as essentially shown in Fig. 3, submitted herewith). As described in the aforesaid paragraph:

From EP-A-0 806 260, a method for removing used elastomeric covers from rollers and a device for performing same are known in which not only smooth cutters, but also ground annular cutting tools are used as cutting tools. These annular cutting tools are attached on a cross at the end of the arms of the indexable insert holder. . . The tool attacks in radial direction.

One of ordinary skill in the art would have readily appreciated that the disclosure at issue describes, at least inherently, the features of "a cutting edge that is arranged spaced radially spaced outwards with respect to the periphery of the [cutting-tool] disk" and the cutting tools being "connected to the disk by screws pointing radially to counteract centrifugal force on the indexable inserts or annular cutting tools caused by rotation of the disk," as recited in claim 3, as presently amended.

New claim 9 is directed to the improvement in a motor spindle, which comprises a spindle and cutter head for working the surface of an elastomer on a rotationally symmetrical body. The

improvement comprises using the presently claimed rotating cutter head as the cutting head of the motor spindle. When the spindle turns clockwise and the rotating cutter head turns counter clockwise, or vice versa, the effective cutting speed at the surface of the elastomer can be increased without increasing the rotation speed or the diameter of the rotating cutter head. Support for claim 9 can be found in the text of the instant specification in the last complete paragraph on page 2 and the paragraph bridging pages 2 and 3. The text at issue compares the rotating cutter head of the subject invention to a machine, i.e., the motor spindle according to DE 43 05 716 (US5660092 to Scholz, of record, being an English language counterpart). It would have been readily apparent to a person skilled in the art that the motor spindle according to DE 43 05 716 can be configured such that the rotating cutter head according to DE 43 05 716 is exchanged by rotating the cutter head according to the invention in order to get the described benefit of reduced costs.

Claims 3 and 4 were rejected under 35 USC 102(b) as being allegedly anticipated by US 5129296 (Wayne). Reconsideration is requested.

For anticipation under § 102 to exist, each and every claim limitation, as arranged in the claim, must be found in a single prior art reference. *Jamesbury Corp. v. Litton Industrial Products, Inc.*, 225 USPQ 253 (Fed. Cir. 1985). The absence from a prior art reference of a single claim limitation negates anticipation. *Kolster Speedsteel A B v. Crucible Inc.*, 230 USPQ 81 (Fed. Cir. 1986). A reference that discloses "substantially the same invention" is not an anticipation. *Jamesbury Corp.* To anticipate the claim, each claim limitation must "*identically* appear" in the reference disclosure. *Gechter v. Davidson*, 43 USPQ2d 1030, 1032 (Fed. Cir. 1997) (*emphasis*

added). To be novelty defeating, a reference must put the public in possession of the identical invention claimed. *In re Donahue*, 226 USPQ 619 (Fed. Cir. 1985).

Wayne discloses a saw blade designed to cut yieldable material. The saw blade is substantially circular, comprising recesses 22. Inside of the recess 22, cutting edges 24 and 28 are provided (Wayne Fig. 2). Thus, the saw blade comprises a sharpened inner edge, but not a sharpened outer edge (Wayne column 4, lines 28-34). Thus, it is necessary that the outer part of the saw blade is pushed into the yieldable material until a cutting element engages the material (Wayne Abstract).

The saw blade according to Wayne cannot be operated by high cutting speeds, especially not at a cutting speed of 10-10m/s. Due to the high cutting speed, the yieldable material would behave like a solid material (see US 5,660,092 of record, column 2, lines 44-48). Due to the high cutting speed, the saw blade cannot be pushed into the yieldable material and, so, cutting does not occur.

The statement of rejection implicitly acknowledges that the present claim limitations on cutting speed and rotation are not found, per se, in Wayne; the rejection implicitly alleges that these limitations are *inherently disclosed* in the reference. The reliance on inherency is mistaken.

For the doctrine of inherency to apply it must be "*inevitable*" from the teachings of the prior art. *In re Wilding*, 190 USPQ 59, 62 (CCPA 1976) (*emphasis added*). "In relying on a theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter.

1990) (*emphasis in original*). Before "the burden shifts," the examiner has "the initial burden of establishing a prima facie basis for the alleged inherency." 17 USPQ2d at 1463-64. An argument by the PTO is "not prior art." *In re Rijckaert*, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). When the

PTO asserts that there is an . . . implicit teaching . . . in the prior art, it must indicate where such a teaching or suggestion appears *in the reference*. ... The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient to establish inherency.

28 USPQ2d at 1557 (*emphasis added*).

The rejection fails to "provide" the requisite "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art." Accordingly, the rejection under §102(b) cannot be maintained. *Levy, supra*.

Moreover, the facts show that the *inevitability* necessary to establish inherency is lacking. Wayne does not perform cutting at high cutting speeds; the saw blade is structurally designed such that a cutting speed of 10-100 meters/second, as recited in the rejected claims, is impossible, due to the absence of cutting.

Moreover, the saw blade is intended to provide a saw slit that is as small as possible. Since cutting head is intended to work the surface of elastomers, the indexable inserts or annular cutting tools are as broad as possible. Thus, a person skilled in the art has no motivation to configure a saw blade such that the cutting saw does not only cut but even work the surface of elastomers with a high cutting speed. It is at least necessary to broaden the width of the cutting disk in order to prevent a breaking of the cutting disk at high cutting speeds due to the high forces occurring at the high cutting

speeds. In order to work the surface of elastomers, it is necessary to cut away a lot of material over a large area, i.e., the whole surface of a roller. Thus, working the surface of elastomers by use of a saw blade according to Wayne would be a time consuming process that would require high maintenance and repair efforts, since the small cutting edges become blunt after a short time period.

Thus, since obtaining the cutting speeds in accordance with the rejected claims is not an inevitable feature disclosed in Wayne, the subject matter of claims 3 and 4 cannot be anticipated by the reference under §102(b). *Wilding, supra*.

Claims 4-8 were rejected under 35 USC 103(a) based on the combined teachings of Wayne and US5660092 (Scholz). Reconsideration is requested.

First of all, the §103(a) rejection cannot be maintained because it mistakenly relies on limitations in the rejected claims be inherently disclosed in Wayne, as explained above with respect to the rejection under §102(b). A "retrospective view of inherency is not a substitute for some teaching or suggestion which supports the selection and use of the various elements in the particular claimed combination." *In re Newell*, 13 USPQ 2d 1248, 1250 (Fed. Cir. 1989).

Moreover, the rejection under §103(a) cannot be maintained because one skilled in the art would not have been motivated to combine Scholz and Wayne as alleged in the statement of rejection. In the context of a rejection for obviousness under §103, the "Examiner bears [both] the initial burden . . . of presenting a *prima facie* case of unpatentability" and "the ultimate burden of persuasion on the issue." *In re Oetiker*, 24 USPQ 1443, 1444 and 1447 (Fed. Cir. 1992). "The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that

knowledge generally available to one of ordinary skill in the art *would lead* that individual to combine the relevant references. . . . Indeed, the teachings of the references can be combined only if there is some suggestion or incentive to do so." *Ex parte Obukowicz*, 27 USPQ 1063, 1065 (BPA&I 1992)(*emphasis, added*).

In the present case, it must be remembered that Scholz must be considered in its entirety, i.e., as a whole. The totality of each reference's teachings must be considered when combining those teachings with the rest of the prior art. *W. L. Gore & Assoc., Inc. v. Garlock, Inc.*, 220 USPQ 303, 311 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

It is impermissible within the framework of §103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciate of what such reference fairly suggests to one of ordinary skill in the art.

In re Hedges, 228 USPQ 685, 687 (Fed. Cir. 1986). Taking the teachings of each of Wayne and Scholz *as a whole*, it is readily appreciated how one skilled in the art would *not* have considered it obvious to combine the references as alleged in the statement of rejection.

Scholz discloses a rotation speed of about 500 – 120,000 rpm (Scholz column 2, lines 28-29). At this rotation speed, treatment of an elastomer is just barely possible. Especially, at the lower region of the disclosed 500 – 120,000 rpm range, the resulting surface (of the elastomer) is very poor (i.e., irregular) due to the elasticity of the elastomer. For this reason, Scholz teaches using, preferably, the upper region of the disclosed 5000 – 120,000 rpm range (Scholz column 2, lines 29-

30). At the preferred high-rotation speed as taught by Scholz, the elastomer behaves like a solid (Scholz column 2, lines 43-48).

Thus, Scholz effectively teaches away from the presently claimed invention, i.e., the feature of rotating the cutter head at a speed no greater than 3000 rpm. The 3000 rpm speed appears surprisingly low in comparison to the Scholz 5000 – 120,000 rpm range. Moreover, the indexable inserts are arranged orthogonally with respect to the cutting disk, leading to a rotating cutting head comprising at most three indexable inserts. Due to the low number of indexable inserts, the rotating cutter head according to Scholz requires high maintenance and repair effort, since the indexable inserts become blunt after a short time period.

Further, to meet the present (rejected) claims, the Scholz saw blade must be structurally redesigned to effect cutting speeds of 10-100 m/s. If such a saw blade should be used in the method according to the presently claimed invention, the prior art saw blades would be structurally designed for only low cutting speeds i.e., much below 10m/s, as can be seen best at the cut-off saw according to Proulx (US 5,647,264).

The indexable inserts are fastened to a cutter disk 15 by a single screw 17 pointing parallel to the rotation disk of the cutter disk 15 (fig. 1). Due to the small width of the cutting disk 15 (fig. 15) an engagement of the very short screw 17 is very small leading to a very small holding force. Due to the high centrifugal force at high rotation speed and high cutting speed, the holding force of the screw 17 would not be sufficient to keep the indexable inserts 14 in place. In fact, screw 17

would brake and the indexable inserts 14 would fly away even before a cutting speed of 10 m/s may be reached.

In contrast to the saw blades and the like of the prior art, the rotating cutter head presently claimed is structurally designed such that a high cutting speed at the periphery is possible. For example, the presently claimed rotating cutting head comprises indexable inserts fastened by screws pointing in the radial direction (Fig. 3). This design counteracts the centrifugal forces occurring at the periphery of large-diameter disks rotated at high speed. Since the cited prior art lacks such a structural design, a person skilled in the art would not have used the saw blade of Scholz in the Wayne device in order to effect a cutting speed of 10-100 m/s.

***Request for Acknowledgment of
Foreign Priority Under 35 USC 119***

A claim to foreign priority under 35 USC 119 has been made (inventorship declaration of record, filed February 18, 2004) and the certified copy of the priority document filed February 8, 2000, in the PTO in parent application no. 09/249,087.

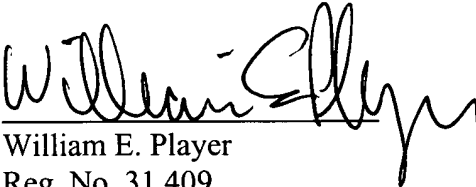
Accordingly, request is made that the Examiner mark the next Office Action to acknowledge, both, the claim to §119 priority and receipt of the certified copy.

Favorable action is requested.

Respectfully submitted,

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Amendments to the drawings:

Figures 1-4, submitted in accordance with the requirement set forth in the parent application, is presented in drawings sheets (Appendix, *supra*).

Attachment:

Two sheets of drawings.

APPENDIX
(Sheets of Drawings)